Remarks/Arguments

The Examiner has objected to claims 9 and 12 on the ground that they "... depend from claim 2 and state that the means from for moving the object holder include a loop and pulley system, but claim 2 requires the means for moving the object holder comprise a rack and pinion type moving system."

The Examiner has apparently continues to misunderstand both the invention and the grammar of the claims. The invention includes means for moving the object holder in three directions \underline{x} , \underline{y} and \underline{z} , not just one. Claim 2 states that a means for moving the object holder in the \underline{z} direction comprises a rack and pinion. Claim 2 is <u>not</u> restricted to a particular means for movement in the x or y directions or the inclusion of additional means in the z direction.

The express language used by the Examiner is: "Regarding claims 9 and 12, claims 9 and 12 depend from claim 2 and state that the means for moving the object holder <u>include</u> a loop and pulley system, but claim 2 requires the means for moving the object holder <u>comprise</u> a rack and pinion type moving system." (emphasis added).

The actual language with respect to the rack and pinion is: "means for moving the object holder relative to the optical path so that a held specimen moves in a direction parallel or coincident with the optical path said means comprising at least one rotatable focusing knob attached to a pinion to move a rack that moves the stage in the z direction ..."

With respect to movement in the x-y direction, the actual claim language is: means for moving the object holder in an x or y direction perpendicular to the z direction so that a held specimen moves through the optical path parallel to the planar surface ..."

Both of the words "include" and "comprise" permit the inclusion of other elements.

Further, the only requirement with respect to a rack and pinion is that one be present in the

means for movement in the z direction. It is therefore completely consistent to have both a rack

and pinion and pulley system in the same apparatus, especially when the "means for moving the

object holder in an x or y direction perpendicular to the z direction" comprise the pulleys as set

forth in claims 9 and 12.

The objections to claims 9, 10 and 12-15 should clearly be withdrawn.

The Examiner has also rejected claims 2-7 and 17 under 35 U.S.C. 103 as being

unpatentable over Hodgson (U.S. 4,911,543) in view of Takeuchi (U.S. 6,313,943).

This rejection should clearly be withdrawn.

The Examiner still has apparently not appreciated the invention in that limitations in the

claims going to the heart of an important advantage of the apparatus of the invention. The

present invention permits efficient operation of a microscope with respect to focus of an object

by movement in a z direction and placement of the object by movement in x and y directions

with minimal hand movement.

An important limitation in Claims 2-7 and 17 is "an x-y control having coaxial x and y

control knobs, said x-y control being mounted so that the rotational axis of the x and y

control knobs intersect a rotational axis of the rotatable focusing knob of the microscope,

when the optical path passes through a center of a specimen holding area of the object

holder.

This arrangement permits easy one hand operation with minimal hand movement.

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None of the cited references, alone or in combination, disclose or suggest this unobvious

structure.

The hand has to move all over the place when using the structure described in Hodgson.

Hodgson actually teaches away from such an apparatus in that the x and x control knobs are

widely separated and certainly not coaxial. Further, there is no possibility that the axes of both

the x and y control knob can intersect the rotational axis of the focusing knob and certainly

not at a position where the optical path passes though the specimen holding area as clearly

required by the rejected claims

Takeuchi does nothing at all to cure the critical defects of Hodgson. Takeuchi. describes

a stage apparatus only, not a full microscope. Focus is not even discussed and certainly not a

possibility that the axes of both the x and y control knob can intersect the rotational axis of the

focusing knob and certainly not at a position where the optical path passes though the specimen

holding area as clearly required by the rejected claims.

Combining a teaching concerning a microscope stage (with no discussion at all

concerning focus) with a microscope having no focus knob/x-y knob axis intersection does not

suggest a possibility that the axes of both the x and y control knob can intersect the

rotational axis of the focusing knob and certainly not at a position where the optical path

passes though the specimen holding area as clearly required by the rejected claims.

The rejection must clearly be withdrawn.

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Claims 8-15 have been rejected under 35 U.S.C. 103 as being unpatentable over Hodgson

in view of Takeuchi in view of Aihara et al (U.S. 5,906,148)..

This rejection is clearly improper and should be withdrawn.

All of claims 8-15 contain the important limitations of claims 2-7 and 17 discussed

above, i.e. said x-y control being mounted so that the rotational axis of the x and y control

knobs intersect a rotational axis of the rotatable focusing knob of the microscope, when the

optical path passes through a center of a specimen holding area of the object holder.

It is clear that the combination of the Hodgson patent and the Takeuchi patent do not

disclose or suggest the above important claim limitations for the same reasons discussed above.

The Aihara et al. does nothing the cure the critical defects of the already discussed Hodgson

patent and the Takeuchi patent. It is clear that Aihara et al. discloses absolutely nothing

concerning an x-y control having coaxial x and y control knobs, and that the x-y control is

mounted so that a rotational axis of the x and y control knobs intersect a rotational axis of the

rotatable focusing knob of the microscope, when the optical path passes through a center of a

specimen holding area of the object holder. As in Hodgson, Aihara et al. actually teaches away

from the present invention by having control knobs all over the place. Further, Aihara et al. is

not even directed to a microscope but to a microtome that does not even have a focusing knob.

It is thus clear that this combination of references does not and cannot render the

presently claimed invention obvious to one skilled in the art under 35 U.S.C. 103.

The only amendment made to the above claims was the formal amendment adding of

antecedent basis for the z axis set forth in already pending claim 1. The claim was already clear

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but it was thought that the amendment should be made simply to meet usual formality

requirements. No new matter was added and no new issues were raised. The amendment was

not made earlier since the presence of the definite article "the" before the z axis in claim 2 was

only noticed during preparation of the present response.

All outstanding objections and rejections should clearly be withdrawn

Conclusion

Applicant respectfully submits that all pending claims are now in condition for

allowance, which action is courteously requested.

Respectfully submitted,

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